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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,167	10/25/2001	James M. Tibbitt	37,270	3418

7590 12/18/2002

BP America Inc.  
Docket Clerk, Law Department, M.C. 2207A  
200 East Randolph Drive  
Chicago, IL 60601-7125

EXAMINER

CHEN, VIVIAN

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 12/18/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/028,167

Applicant(s)

TIBBITT ET AL.

Examiner

Vivian Chen

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over ROTTER ET AL (US 6,406,766).

ROTTER ET AL discloses an oxygen scavenging composition with good clarity suitable for forming single layer packaging materials such as films and bottles for oxygen sensitive materials, wherein said composition comprises a copolymer containing over 50 wt% polycondensate segments such as PET and 0.5-20 wt% oxygen scavenging moieties (OSM) such as unhydrogenated polybutadiene as recited in claims 7-8, 20 and optionally an additional oxygen scavenging compound like a transition metal catalyst (line 62, col. 2 to line 47, col. 3; lines 6-20, col. 4; lines 10-31, col. 6) as recited in claims 1-6, 9, 11-12, wherein the packaging material is optionally coated (line 44, col. 8 to line 10, col. 9) as recited in claim 14, 17. The film is recyclable (lines 65-68, col. 3) as recited in claim 15, 18. However, the reference does not explicitly disclose the recited migration limit.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the formulations as disclosed in ROTTER ET AL to form single layer

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packaging for oxygen sensitive materials, with the formulations being selected to have low amount of migrating components from the film in order to prevent contamination of package contents. One of ordinary skill in the art would have incorporated known polymeric diluents such as unmodified polyester resin in the packaging material as indicated in claim 13 in order to optimize the oxygen scavenging, recyclability, and mechanical properties of the film for a given application. Since the compositions disclosed in ROTTER ET AL are substantially similar to those recited in the claims, the Examiner has reason to believe that the prior art packaging compositions have haze and migration limit values comparable to those recited in claims 10-11, 16, 19-20.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over SPEER ET AL (US 5,350,622 or US 5,700,554).

SPEER ET AL '622 and '554 each disclose an oxygen scavenging composition suitable for forming single layer packaging materials for oxygen sensitive materials, wherein the composition comprises PET, a polybutadiene (co)polymer, and a transition metal catalyst (SPEER ET AL '662, lines 23-68, col. 4; lines 15-50, col. 5; line 65, col. 5 to line 13, col. 6; lines 15-16, col. 7) (see corresponding portions of SPEER '554) as recited in claims 1-4.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the compositions disclosed in SPEER ET AL '622 and '554 in single layer packaging materials in order to simplify manufacture and recycling.

*Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

CHING ET AL (US 6,454,965) and MATTHEWS ET AL (US 6,254,804) and COCHRAN ET AL (US 5,021,515 and 5,955,527 and 5,639,815) disclose oxygen scavenging monolayer films.


CAHILL ET AL (US 6,365,247 and 6,083,585 and 6,346,208) disclose modified oxygen scavenging copolymers.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (703) 305-3551. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 (for non-after finals) and (703) 872-9311 (for after-finals).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

December 15, 2002

  
Vivian Chen  
Primary Examiner  
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